Product instruction manual
Magnum® MFM-PS Folding System

MAGNUM®

Magnum Folders have been designed to be user friendly, however we strongly recommend you take a few minutes to read through this manual to ensure correct operation.

Keep this manual safe for future reference.

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Specifications

Paper Size	A3
Paper Weight	Up to 220gsm single folding, up to 135gsm multiple folding
Paper Quality	Woody paper, high-quality paper, high-quality paper for stencil printing, medium-quality paper
Fold Type	Single, Double parallel, Letter, Gate, Zig-Zag, Fold-out
Paper Feed system	Three-roller friction feed system
Max. Stacking Capacity	500 sheets (64m^2)
Folding Speed	50-200 sheets per minute
Operating Method	Digital key input
Dimensions	610 x 580 x 450mm
Gross Weight	33Kg

Introduction

Thank you for purchasing the Magnum MFM-PS Folding System.

This system enables users to achieve greater efficiency in clerical work by releasing them from paper-folding work that has manually been performed in the past.

Please read these instructions carefully before starting to use the system to ensure you get the best results and are competent at operation.

Should you experience any problems please contact us your supplier.

Safety Instructions

- Make sure that the system is electrically grounded. This prevents an electric shock when there is a leak of electricity.
- Use the system at 110 – 120 VAC, 220 – 240 VAC with a frequency of 50Hz to 60Hz. A fire may start or the system may break down if a higher or lower voltage is used, or if an electric current with a frequency that is not within the range of frequency stated above.
- Do not place any objects on this system. A fire may start or electricity may leak if water or a foreign object enters the system.
- Handle the power cord with care. A fire may start or an electric shock may be caused if the cord is damaged, broken, or processed, if a heavy object is placed on the cord, or if the cord is bent forcibly.
- Do not pull the power plug out of or put it in the electric outlet using a wet hand.
  Otherwise, an electric shock may be caused.
- Do not remove the cover of this system. Otherwise, an electric shock or injury may be caused.
- Do not remodel this system. Otherwise, a fire may break out or an electric shock may be caused.
- If the system is used when it is in an abnormal condition, such as generating heat, emitting smoke, and giving out a strange smell, a fire may break out or an electric shock may be caused. Turn off the power switch immediately and then pull the power plug out of the electric outlet. Afterwards, report the fault to your supplier.
- If abnormalities such as the power cord generating heat and giving out a strange smell are found, turn off the power switch immediately and then pull the power plug out of the electric outlet. Afterwards, report the fault to your supplier.
- If a foreign object enters the system, turn off the power switch first and then pull the power plug out of the electric outlet. Afterwards, report the fault to your supplier.
- If thunder approaches, pull the power cord out of the electric outlet to prevent a fire or breakdown caused by the falling of a thunderbolt.
- Do not let hairs, a necktie or necklace hang above the drive of the system.
  Doing so may cause an injury.
- Do not put the system on an unstable place such as a shaky stand or a slanted floor. Doing so may cause the system to drop or fall down, causing an injury.
- Do not put the system in a moist or dusty place. Doing so may start a fire or cause an electric shock.
- Be sure to pull out the power cord while holding the plug. If the power plug is pulled out while holding the cord, a fire may break out or an electric shock may be caused.
- Be sure to pull the power plug out of the electric outlet first when moving this system.
  Otherwise, the cord may be damaged, causing a fire or an electric shock.
- Be sure to pull the power plug out of the electric outlet for safety purposes when this system is not used for consecutive holidays or for other reasons.

Information Before Use

1. Precautions on Installation

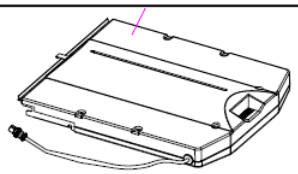
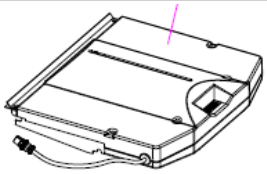
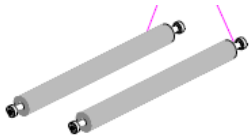
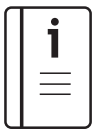
Do not install it in an unstable place such as on a faltering bench or an inclined place.
It may fall down or drop and cause an injury.

Do not install it in a dusty place or a place of high humidity.
It may cause a fire, or an electric shock.

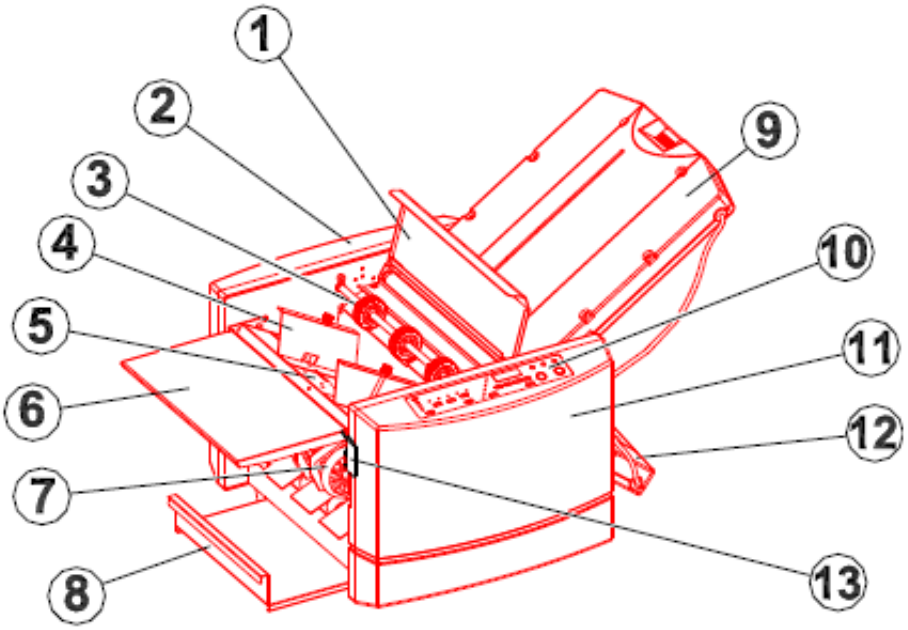
Do not install it in a place exposed to direct sunlight.
Avoid a location near a window.
It should be used at an ambient temperature of 5 to 35°C
Do not install it in a location close to heating equipment.
Do not install it in a place exposed to a direct wind.

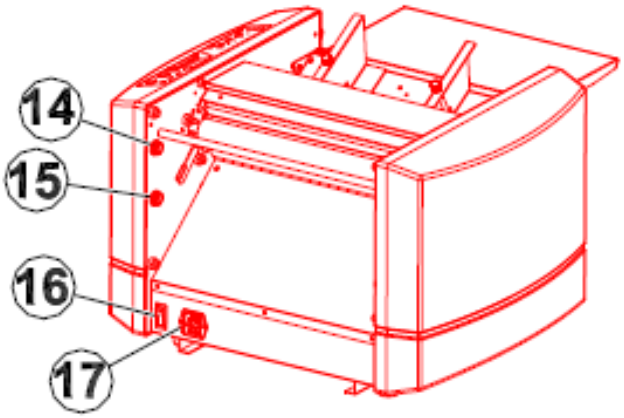
2. Checking Accessories

Check accessories immediately after unpacking. Should an item be missing, contact your supplier.
Also, check if the warranty has the dealer's signature and the date of purchase is mentioned.

Accessory	Quantity	
Table A	1	
Table B	1	
Power Cable	1	
Roller	2	
Instruction Manual	1	

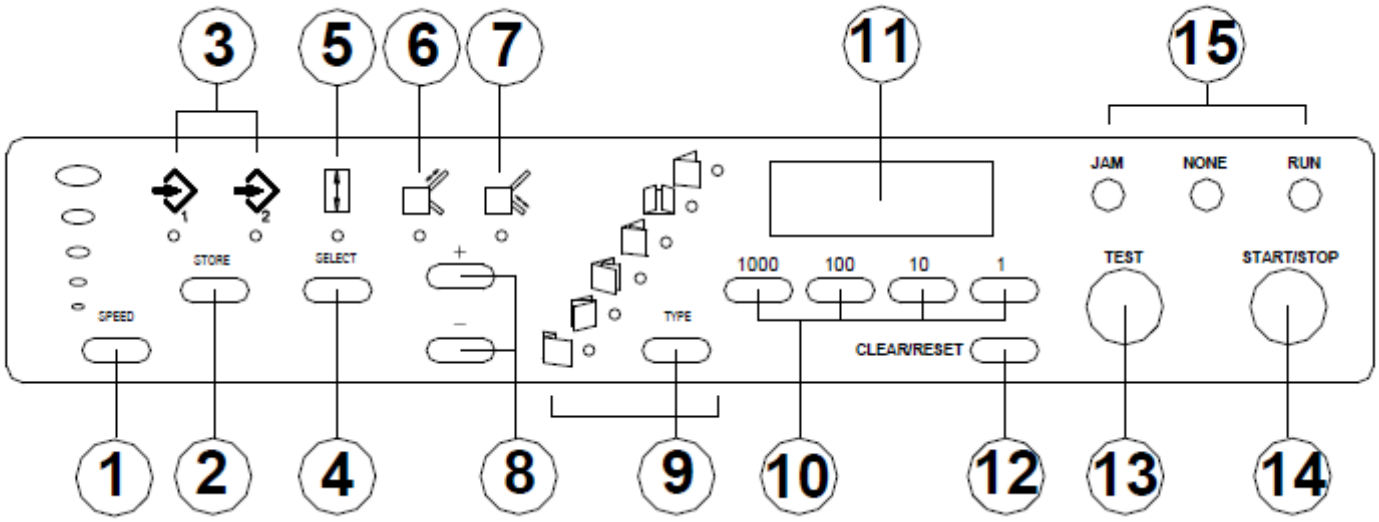
Parts





Number	Name	Number	Name
(1)	Roller cover	(10)	Control panel
(2)	Left side cover	(11)	Right side cover
(3)	Paper feed roller	(12)	Table B
(4)	Paper guide	(13)	Paper feed table lever
(5)	Feed table	(14)	Table A socket
(6)	Auxiliary feed table	(15)	Table B socket
(7)	Paper ejection roller	(16)	Power switch
(8)	Paper stacking table	(17)	Power lead socket
(9)	Table A		

Operation Panel and Functions

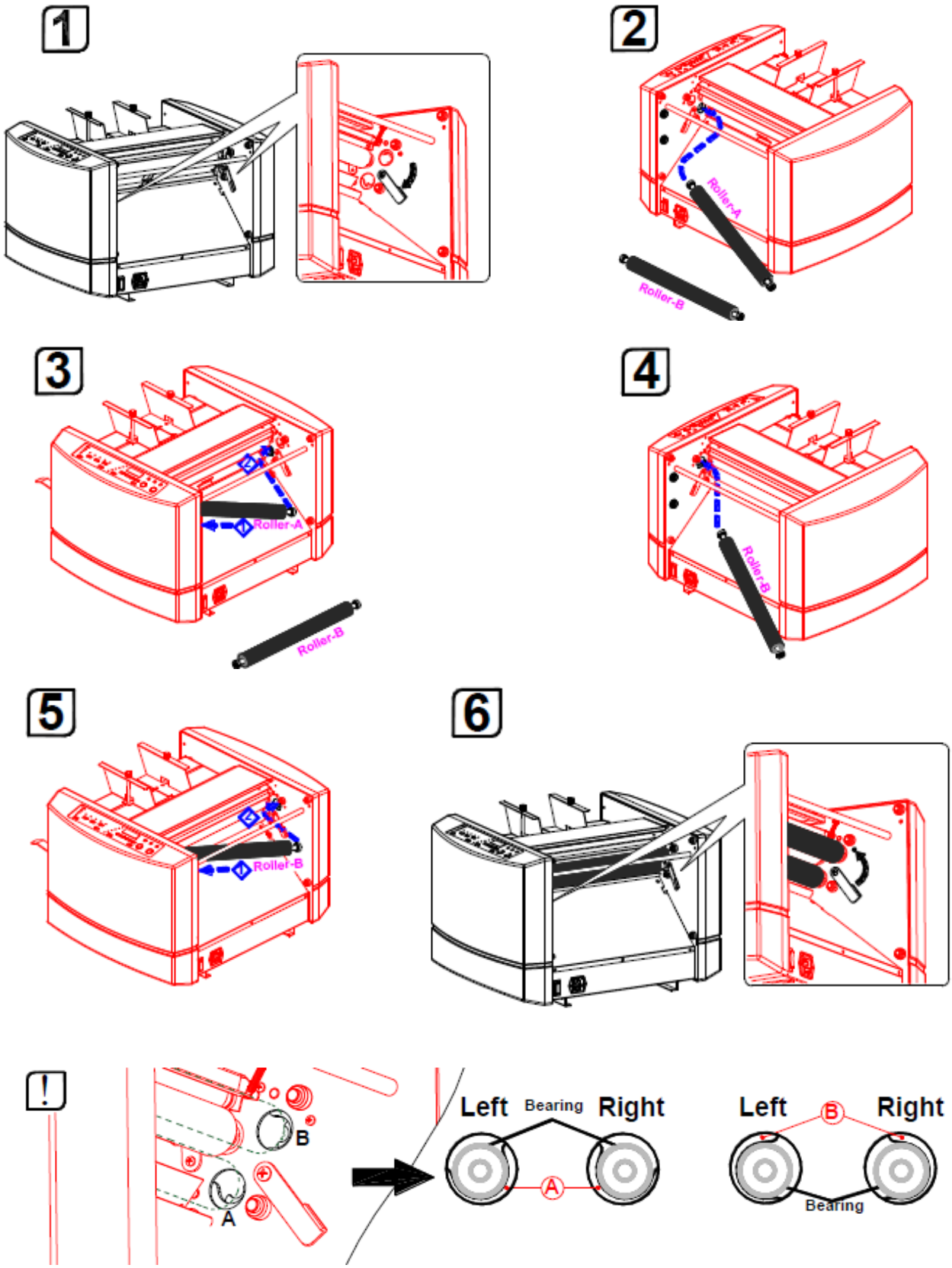


No.	Designation/Indication	Function
(1)	Speed adjustment key	Used for adjusting the speed.
(2)	Store key	Select memory 1/2 stored folding position and the folding position after adjustment is stored.
(3)	Memory 1/2 lamp	Two special folding types are stored.
(4)	Select key	Used for selecting paper length, the feed position of table A and B, indicating of the counter when lights are off.
(5)	Paper length input mode lamp	It is on when paper length is input, if non-standard size paper, press CLEAR/RESET, input correct paper length.
(6)	Table A stopper lamp	Lights when the position of stopper of table A can be adjusted.
(7)	Table B stopper lamp	Lights when the position of stopper of table B can be adjusted.
(8)	+/- key	Used for adjusting the position of the stopper of table A and B.
(9)	Fold type key	Six folding types & six types of paper can be selected and stored.
(10)	Numerical key 1	Used for inputting the reduced number for subtraction counting and the length of non-standard size paper.
(11)	Counter	Shows the number of sheets, the position of the stopper pin of table A and B, and paper size.
(12)	Clear/Reset key	Clears counter indication and resets error. When the paper length lamp is on, press this key, can input non-standard size paper.
(13)	Test key	Test fold one sheet (stopper of table A and B move to the position).
(14)	Start/Stop key	Starts and stops the system.
(15)	Status lamp	Lights when paper stock runs short, or indicates the location when feed trouble occurs.

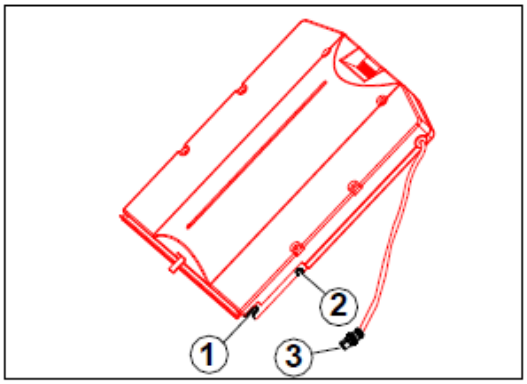
How to Use

1. Preparation

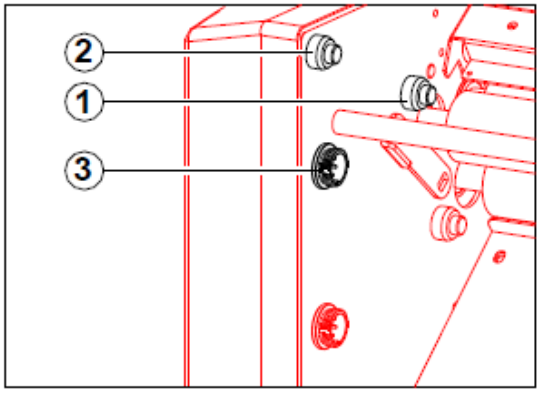
(1) Install the rollers



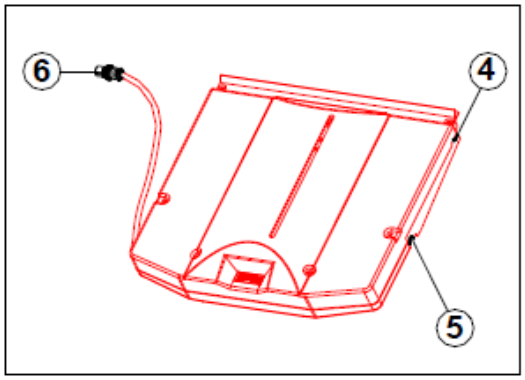
(2) Install table A and B, before starting the system



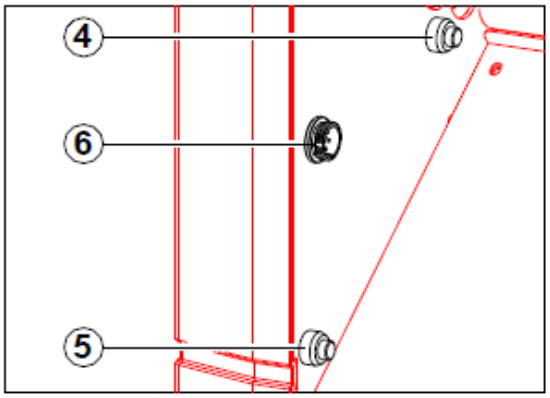
1. Position of Table A's notch and connector.



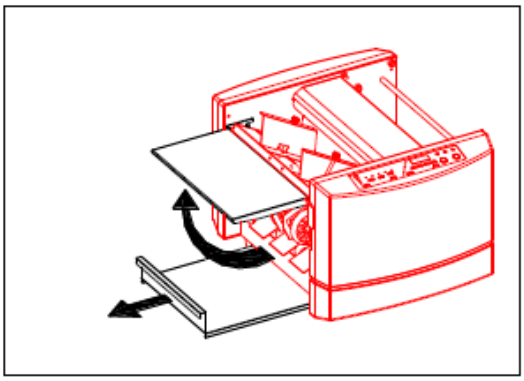
2. Insert the front notched part of Table A into the stud (1) of the system and drop its rear notched part on the stud (2). Insert the plug into the connector (3).



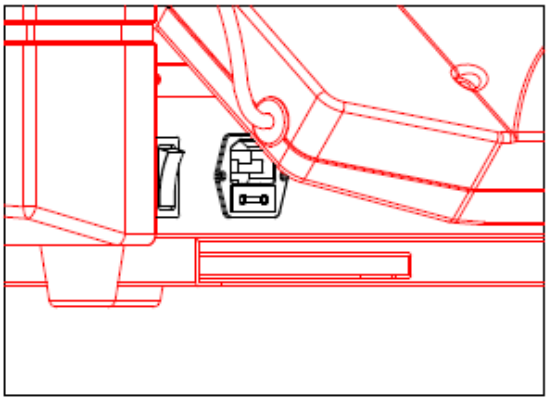
3. Position of Table B's notch and connector.



4. Insert the front notched part of Table 2 into the stud (4) of the system and drop its rear notched part on the and drop its rear notched part on the connector (6).



5. Extend the paper stacking table to required length.

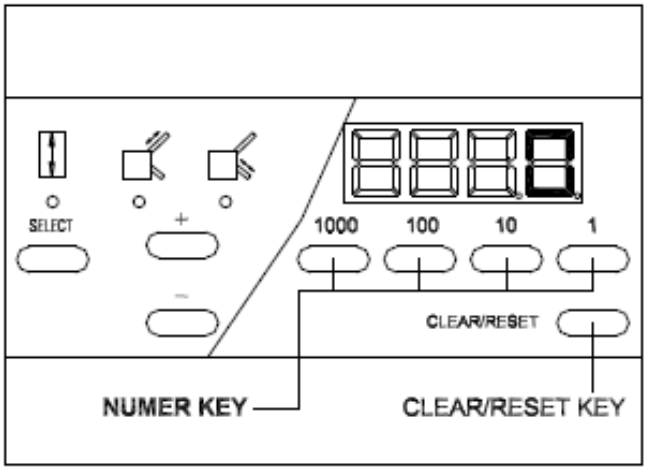


6. Insert the power cord into the adapter and set it while lifting the auxiliary table.

2. Indication of the counter

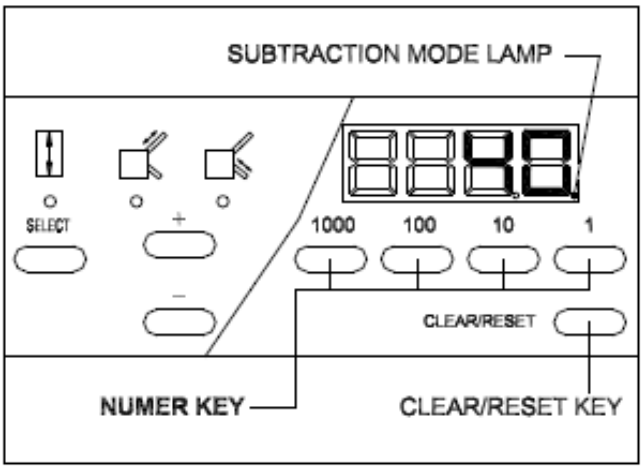
(1) Addition counter

When the three lamps are off, the number indicates the counter. Press start/stop key after choosing the fold type, it automatically counts the folded paper.
Press the Clear/Reset key and reset the number at zero (0).



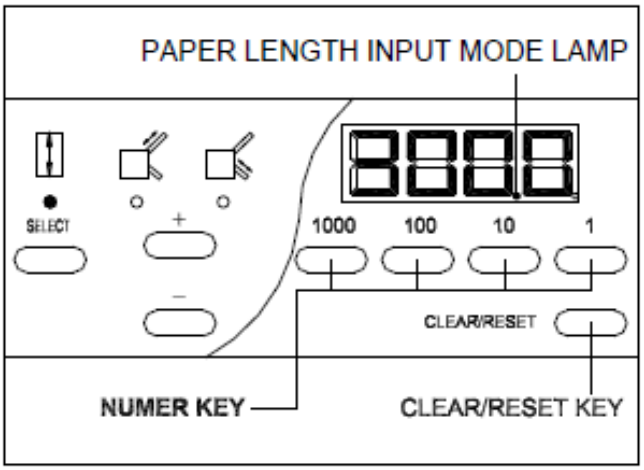
(2) Subtraction counter

When the three lamps are off, the number indicates the counter. Input the desired number using the Numerical keys.
(40 is input in this case)
Subtraction Mode Lamp will light. Press start/stop key after choosing the fold type.
The number on the counter decrease by one each time a sheet of paper is folded. When the number is finished, the counter will return to the desired number again.



(3) Input non-standard size paper length

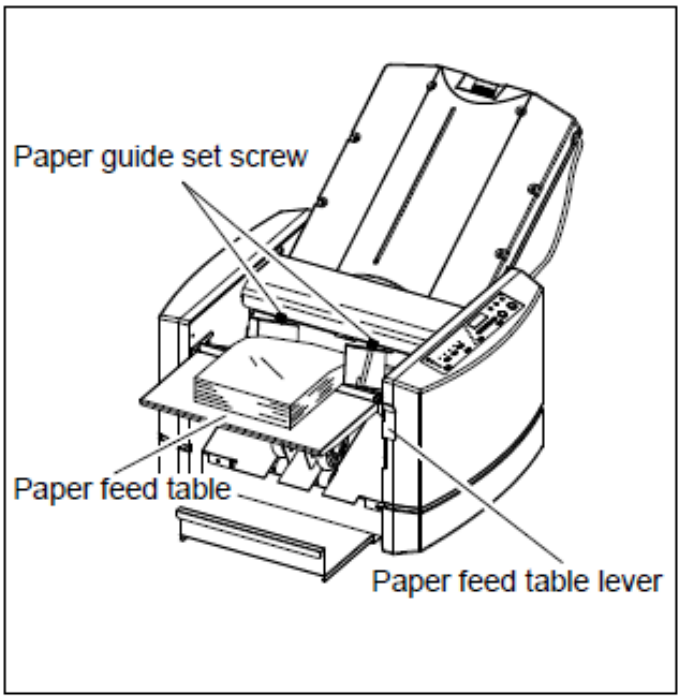
Press the Select key, Paper length input mode lamp is on, press Clear/Reset key.
Input the paper length using the Numerical keys (300mm is input in this case, micro meter can be input after decimal point).
Press store key, and store under 1 or 2 memory indication.



3. How to use

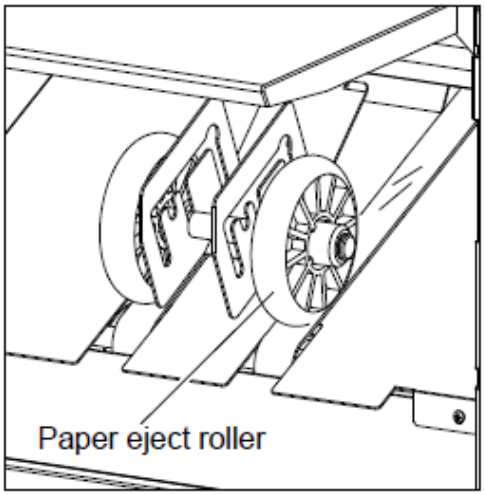
(1) Standard folding of standard size paper

Set the standard-size paper. Loosen the paper guide. Set screw and set the paper guide to fit the width of the paper.
Stack the paper on the paper feed table with its printed side facing up (its printed side down in case of fold-out) after neatly arranging it. Make the paper guide closely contact the paper, and tighten the setscrew. Lower the paper feed table lever to raise the table.



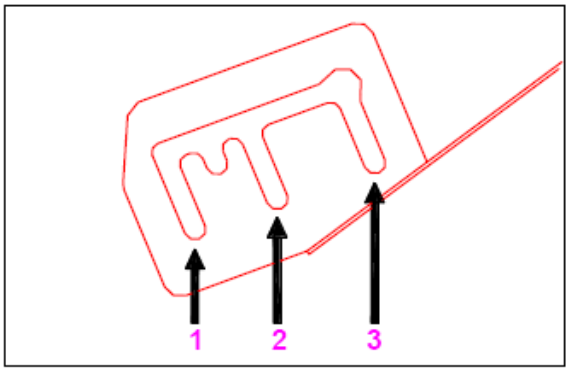
(2) Setting the paper ejection roller

Move the paper ejection roller to the position that fits the size of paper being used. If the roller doesn't run smoothly, change the roller position.



Change the roller position to fit the paper size

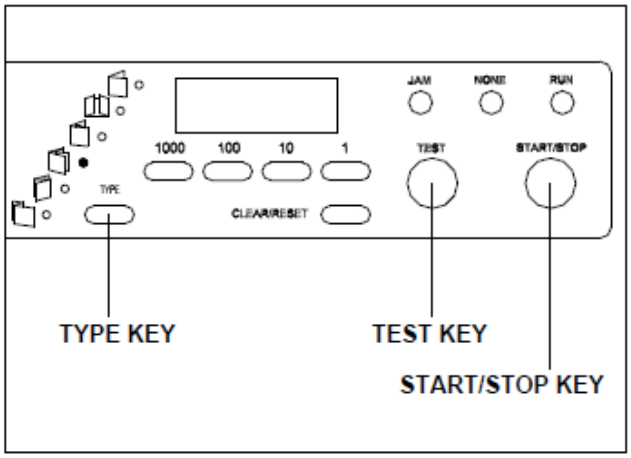
	1	2	3
Standard-size paper	A3	A4/B4	B5/A5/B6
Non-standard-size paper	Setting the designated position according to the paper length		



3. How to use

(3) Selecting the folding type

One of the six folding types (Single, Gate, Letter, Zigzag, Double, Parallel Fold-out) can be selected. Press the desired folding type key.

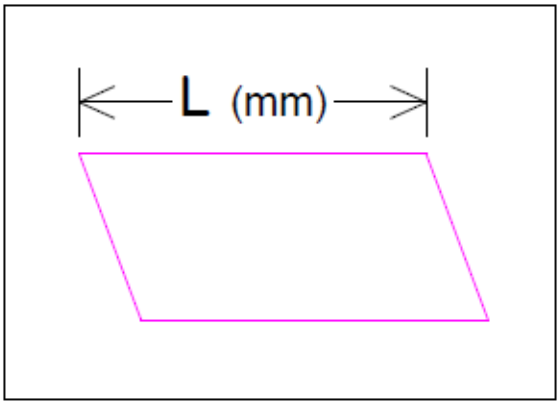


(4) Before folding, press Test key, Table A/B move to the position of designated fold type, one sheet will be folded. Check the paper has been folded correctly. (In case of correcting slanting folding, refer to Adjustment on Chapter 9).

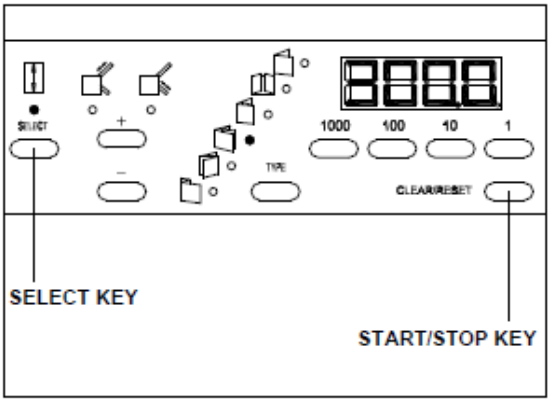
(5) Note: If Table A or B has been adjusted, press Test key before continuous folding, or the adjustment will not be accepted, Table A / B will return to origin before the adjustment. Press the Start/Stop key, the system will continuously fold the paper, and the counter is in addition counting. When the Start/Stop key is pressed while the system is in operation, the system will stop the operation. If only required number of sheets need to be folded, please refer to chapter 6 Subtraction Counter.

3.1 Standard Folding of Non-standard size Paper

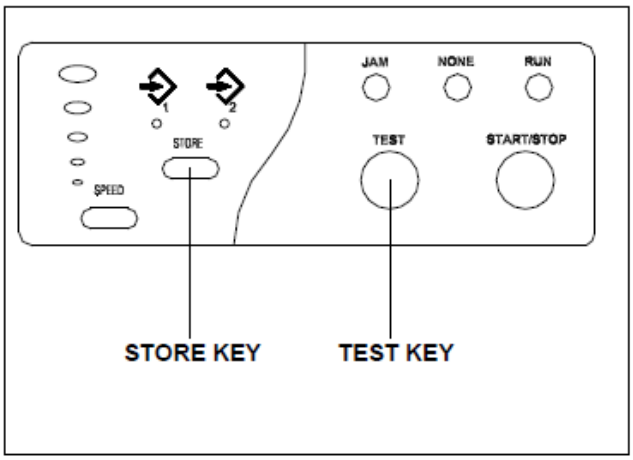
(1) Measure the paper length



(2) Input the paper length - Press the select key and select the paper length input mode. Press clear/reset key. Input paper length by using numerical key.
Note: Input length number should be bigger than B6, smaller that A3, otherwise it will not register.



(3) After inputting the paper length, press store key, choose store at 1 or 2. (press store key and release memory lamp will shift light between 1 and 2; hold pressing store key until "beep" sound, means paper length stored) When paper length is stored, system will adjust 6 fold types according to paper length.
Choose one fold type; Press Test key to check if the fold is correct. (In case of correcting slanting folding, refer to Adjustment on page 14).



Note: The position of the table A and table B stopper in relation to the measurement value L.
Example In the case of performing the Double Parallel fold using sheets of paper 300mm in length:
Table A=300 x (1/2)=150 mm
Table B=300 x (1/4)=75 mm

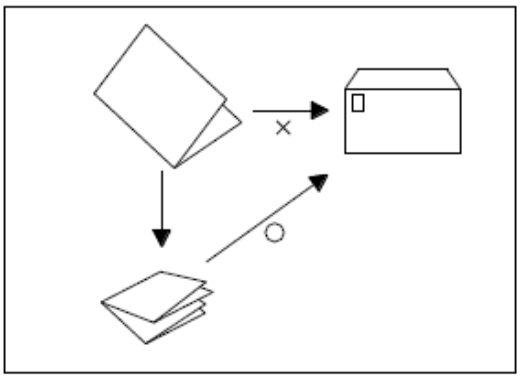
Fold type	Table A	Table B
SINGLE	Original position"O"	1/2
GATE	1/4	1/2
LETTER	1/3	1/3
DOUBLE PARALLEL	1/2	1/4
ZIGZAG	2/3	1/3
FOLD-OUT	3/4	1/4

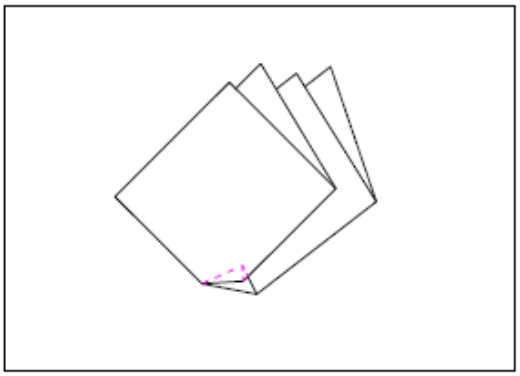
3.1 Cross Folding

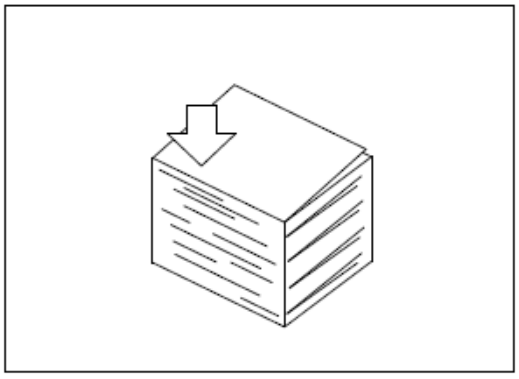
Cross folding can be used if, for example, the sheet of A3-size paper folded using the double parallel folding method is still too large to be enclosed in envelope.

The maximum weight of paper that can be used for cross folding is 105g/m2. This requirement, however, varies according to the following conditions: Paper type; Paper size; Whether grains run lengthways or sideways; Temperature and relative humidity; Printing condition. The folding position may be displaced to a greater extent than when the paper is folded using a regular fold method, or a corner of the folded paper may be folded inside as indicated in the figure. These however, do not mean that the system has broken down.

(1) Adjust the paper feed roller position, so the three rollers feed paper together.
(2) Press the crease hard using the hand. Do not stack too many sheets of paper on the paper feed table.

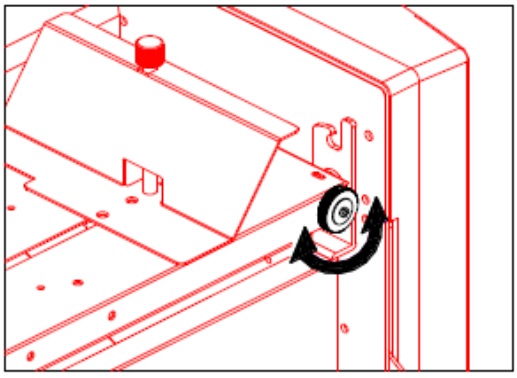


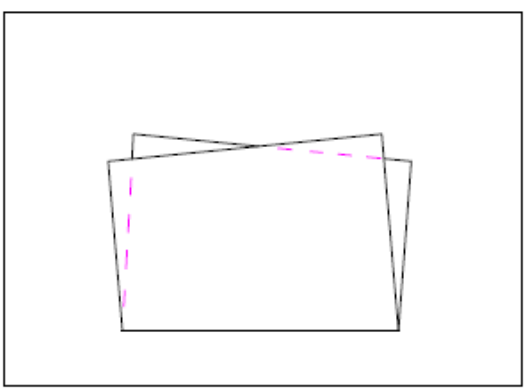




3.2 Slant Adjustment

If the folding position is not square because the edges of the paper are slanted or for other reasons, it can be adjusted using the slant adjustment dial.
After testing paper fold, check the folded paper. If the paper as per the right photo (lower paper is to the right), adjust the knob clockwise.





3.3 Table Stopper Adjustment

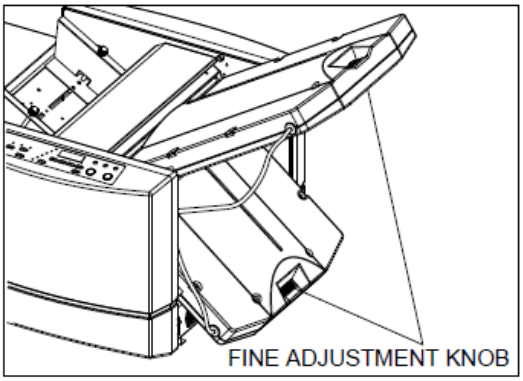
After moving the stop by fold guide fine adjustment dial, make sure to press Test key before the Start/Stop key. Otherwise, adjustment will not be accepted.

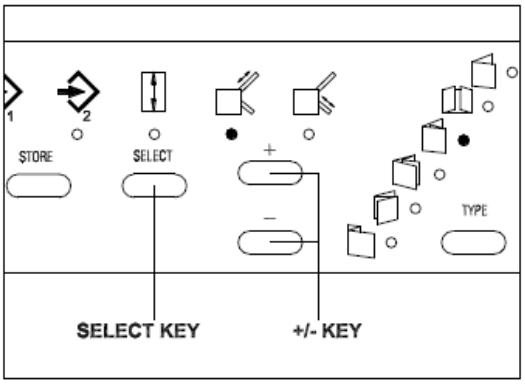
Note: If you press Start/Stop key, after adjusting the fold guide, the fold guide will return to origin to fold.
When the stopper is moved largely, it will be convenient to use the +/– key.

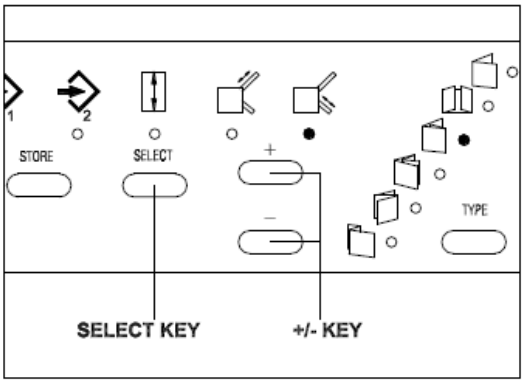
(A). Press the Select key and select the Table A Stopper Move Mode. Press the +/- key and move the stopper to the desired position.

(B). Press the Select key and select the Table B Stopper Move Mode. Press the +/- key and move the stopper to the desired position.

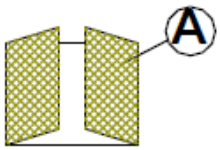
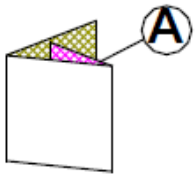
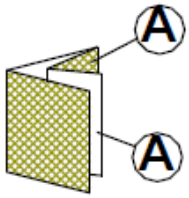
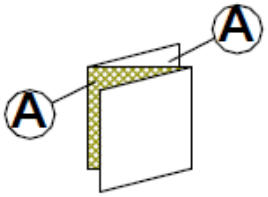
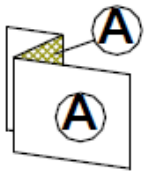
Note: To store the stopper position, after adjusting stopper by using stopper fine adjustment knob or +/- key, please refer to chapter 10 Storage.



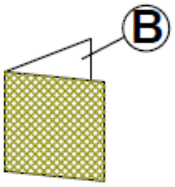
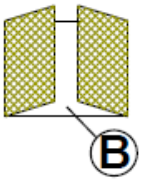
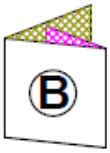
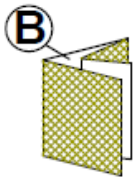
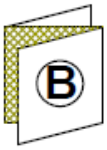
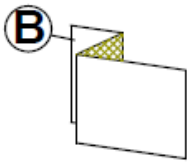




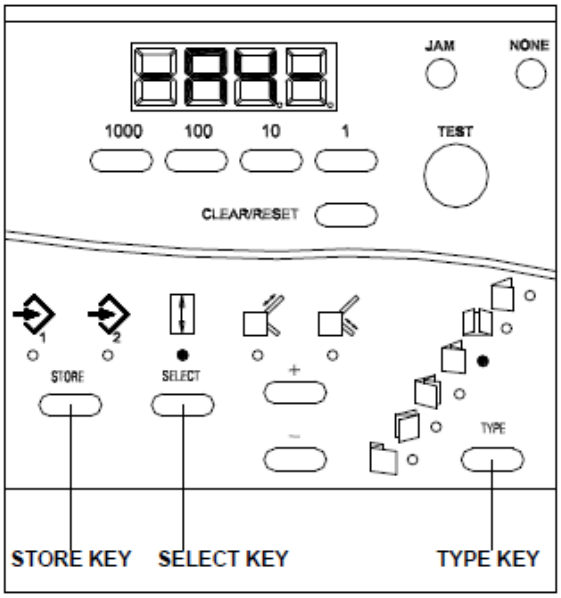
Fine Adjustment for Table A

Fold type		Plane A	Direction to turn the Table A fine adjustment knob
Single Folding	Plane A at "O" position		
Gate Folding		Long	
		Short	
Letter Folding		Long	
		Short	
Double parallel Folding		Long	
		Short	
Zigzag Folding		Long	
		Short	
Fold-out Folding		Long	
		Short	

Fine Adjustment for Table B

Fold type		Plane B	Direction to turn the Table B fine adjustment knob
Single folding		Long	
		Short	
Gate folding		Long	
		Short	
Letter folding		Long	
		Short	
Double parallel folding		Long	
		Short	
Zigzag folding		Long	
		Short	
Fold-out folding		Long	
		Short	

4. Storage



4.1 Standard-size paper fold storage

After adjusting the standard paper (A3,B4,A4,B5,A5,B6), it would be stored into fold type key. One fold type key can store 6 kinds of standard-size paper. (Maximum storage: 6 x 6=36)
You are able to store the folding speed, the positions of the Table A and B.

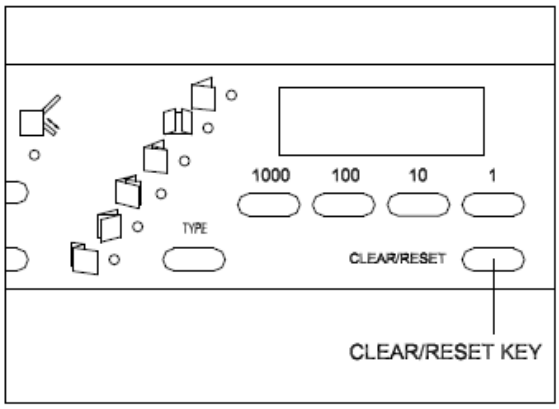
Prepare for the fold type to be stored:
Choose standard-size paper, choose fold type, (in this case, A4, Letter folding are selected) Adjust the Table A and B position, adjust fold speed.
After all adjustment are set, hold press the Select key, until "beep" sound. The lamp of the fold type you chose will flash. Select the same paper, same fold type next time, this lamp will flash.

4.2 Non-Standard size paper fold storage

Measure non-standard size paper length, press Select key to Paper length input mode, press Clear/Reset key. Input paper length using numerical keys,
(Note: number should be bigger than B6, smaller than A3, otherwise can't work. Non-standard size paper length storage)
After inputting paper length, press Store key, select 1 or 2 to be stored. (Press Store key, and release, store lamp will light between 1 and 2; Hold press Store key until the "beep" sound, means paper length stored) When paper length is stored, system will adjust 6 fold types according to the length. Select one fold type, press Test key to check if fold is correct. (If fold incorrect or slating, refer to chapter 9 Adjustment)
(Note For non-standard size paper, to store adjustment of table A's stopper position, hold press Store key until "beep" sound. Same for Table B, hold press Store key until "beep" sound to store).
Example: Paper length has been stored; Store lamp 1 is on; Adjust fold speed; Select one fold type; Press Select Key to choose Table A stopper move mode lamp, use +/-key to adjust and press Store key to store. Same for Table B stopper move mode lamp, use +/-key to adjust and press Store key to store. Next time, choose same paper same fold type.

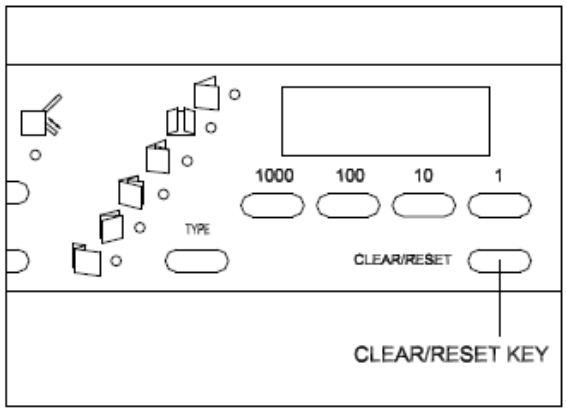
4.3 Cancel single storage

Recover the folding storage set by the manufacturer by Clear/Reset key.
Select the key in which the storage needs to be cancelled, keep pressing Clear/Reset key until "beep" sound, and release immediately.



4.4 Cancel all storage

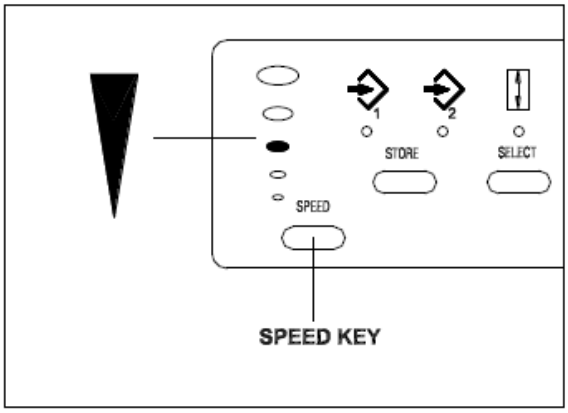
Recover folding storage set by the manufacturer by cancel all storage.
Keep pressing Clear/Reset key, do not release the key at first beep; Release the key until the second beep. All stored information is cancelled, system return to manufacturer's original set.



	Situation	Solution
JAM	Paper jam at table A or B	Remove jammed paper
	Paper jam on ejection roller or too much paper on stacker	Remove jammed paper or change ejection roller position (Refer to **7-2-1** position of roller)
NONE	No paper on feed table	Put table on feed table
	Paper table not raised	Pull down paper feed table lever
	Roller cover is open	Close the cover
	Table A and B do not return or connect	Make sure the plug is correct insert to machine. Refer to **5-2** Installation of TableA/B
RUN	Machine is running	

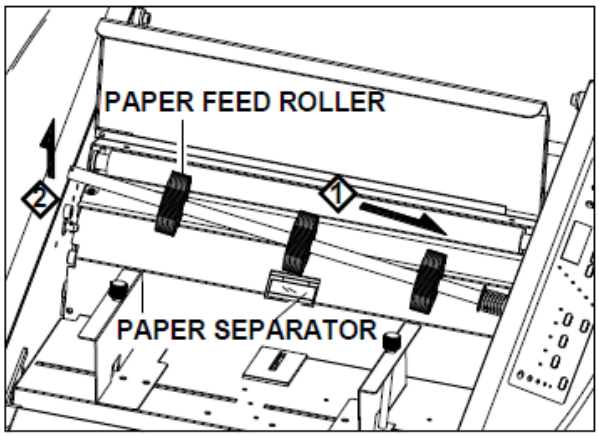
5. Speed Control

If fold is incorrect, change the speed accordingly.
If crease or fold unevenly, lower the speed.
If thick paper is fed improperly, increase the speed.
Note if the fold speed changes at correct fold position, you may need to adjust stopper position.

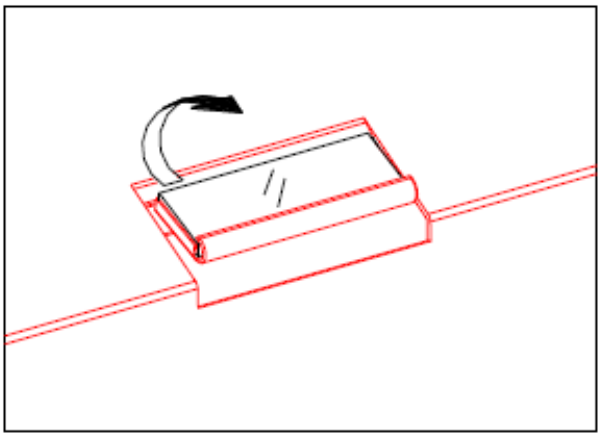


6. Change paper feed roller and rubber pad

Open Roller cover, push the roller to the right side, pull the other side of the roller to remove.

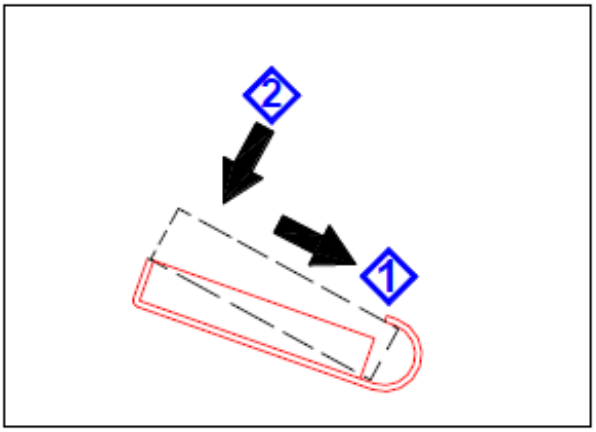


Change roller Rubber pad
Remove rubber pad
Raise the back side to remove pad



Install rubber pad
Install the pad as in the photo right

Make sure paper feed roller and roller pad are properly installed and placed.



Warranty & Incorrect Use

IMPORTANT INFORMATION

Your Magnum Folding Machine should reach you in perfect condition, however please retain all of the original packaging once you have unpacked your Folding Machine in case you need to return it for repair. If your machine arrives damaged or faulty in anyway, this must be reported to your supplier immediately. If the Folding machine is sent back for repair under warranty and is damaged in transit due to faulty packaging your warranty may be void.
The Folding Machine you have purchased includes a 1 year warranty on defective parts and general wear and tear. It does not cover any jams or misfeeds caused by operator error and you could be liable for the repair costs (including delivery charges) if damage is caused by operator error.

E&O.E